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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MEHMET KEMAL OZKAN, CHIA-YUAN TENG,
and EDWIN ARTURO HEREDIA

Appeal 2008-2896
Application 09/622,331
Technology Center 2600

Decided: September 11, 2008

Before JOSEPH F. RUGGIERO, JOHN A. JEFFERY, and KEVIN F.
TURNER, *Administrative Patent Judges*.

JEFFERY, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134 from the Examiner's rejection of claims 1-16. We have jurisdiction under 35 U.S.C. § 6(b). We AFFIRM.

STATEMENT OF THE CASE

Appellants invented an apparatus and method for acquiring packet data to facilitate decoding. The apparatus has a processor that obtains program guide information and ancillary information. The ancillary information includes hierarchically associated version identifiers and enables the decoder to identify changes in the content of a data table by examining the version identifiers. The apparatus also includes a processor for acquiring partition identifiers assigned to partitions of the program guide so as to adapt to repartitioned program guide data.¹ Representative claim 1 is reproduced below:

1. Apparatus for acquiring packetized program data from at least a first source, comprising:

a processor for acquiring program guide information and for acquiring ancillary information conveyed in hierarchically ordered data tables in said packetized program data, said ancillary information including,

(a) a first version identifier conveyed in a primary data table and updated in response to a version change in at least one of a plurality of secondary tables hierarchically linked to said primary data table, and

(b) a second version identifier conveyed in a secondary data table and updated in response to at least one of, a version change in said secondary table, and a version change in a tertiary table hierarchically linked to said secondary table;

a processor for determining change in said secondary data table content by examining said second version identifier for a change following determination of a change in said first version identifier; and

an acquisition processor for acquiring said secondary data table in response to said determination of change.

¹ See generally Spec. 2:24-33, 4:15-37, 11:20-12:20, and 14:16-15:28.

The Examiner relies upon the following as evidence in support of the rejection:

Eyer	US 6,160,545	Dec. 12, 2000
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ADVANCED TELEVISION SYSTEMS COMMITTEE, PROGRAM AND SYSTEM INFORMATION PROTOCOL FOR TERRESTRIAL BROADCAST AND CABLE §§ 1-1.2; 4-4.2; 5; 6.2 and 6.5; and D-D3 (1997) (hereafter “ATSC”).

Claims 1-16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Eyer and ATSC.

Rather than repeat the arguments of Appellants or the Examiner, we refer to the Briefs² and the Answer³ for their respective details. In this decision, we have considered only those arguments actually made by Appellants. Arguments, which Appellants could have made but did not make in the Briefs, have not been considered and are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(vii).

ISSUE

The issue is whether Appellants have shown that the Examiner erred in finding that the combination of Eyer and ATSC teaches the limitation of a second version identifier updated in response to a version change in the secondary table.

² We refer to the Appeal Brief filed March 6, 2007, and the Reply Brief, filed September 11, 2007, throughout this opinion.

³ We refer to the Examiner’s Answer mailed July 25, 2007, throughout this opinion.

FINDINGS OF FACT

The record supports the following findings of facts (FF) by a preponderance of the evidence:

1. ATSC defines a standard protocol compatible with bit streams using a MPEG-2 format. The ATSC standard transmits a Master Guide Table (MGT) and at least one Event Information Table (EIT) contained within packets carried in the transport stream (ATSC, pp. 1 and 2).
2. ATSC discloses the MGT and EIT are hierarchically linked (ATSC, pp. 9, 11, and 71).
3. ATSC discloses the MGT is a first data table in the transport stream that defines the version for all the tables in the transport stream (except the System Time Table) and includes ancillary information having a first version identifier or the `table_type_version_number` (ATSC, pp. 15-18).
4. The EIT is a second table in the transport stream and contains ancillary information including a second version identifier or `version_number` (ATSC, pp. 30-33).
5. ATSC explains that certain EITs become obsolete as the hours in a given day progress. As a result, a shift of the list of PID values and version numbers in the MGT occurs. This shift additionally includes updating version numbers in the tables (ATSC, pp. 12, 18, 31, 72, 73, and 76).
6. ATSC shows that the `table_type_version_numbers` of the MGT are updated in response to a version change in at least one of the EITs. ATSC also explains another identifier or the version number of the

MGT is incremented when any field in the table_types defined in the loop change (ATSC, pp. 11, 12, 16-18, and 71-73).

7. ATSC shows the version_number of the EIT is updated in response to a version change in the secondary table or EIT (ATSC, p. 12, 31, 32, and 73).
8. The Interactive Program Guide (IPG) data for television in Eyer is formatted using a MPEG-2 standard or is MPEG-2 compliant (Eyer, col. 1, ll. 8-17, col. 8, ll. 12-17, and col. 11, ll. 34-41).
9. Eyer discloses the transmitted data blocks of the IPG are formatted using tables (Eyer, col. 11, ll. 34-41 and col. 12, l. 1 – col. 13, l. 20)
10. ATSC provides a standard for program guide data compatible with data streams in accordance with MPEG-2 systems: (1) to anticipate future services and changes in service; (2) to design a distributed information model as opposed to a centralized one; and (3) to take advantage of a standard that coordinates and combines program guides from a number of broadcasters (ATSC, pp. 1, 2, 70, and 71; Ans. 5).
11. ATSC explains table_type_version_number in the MGT will be the same as the version_number in the actual EIT and the value of the version_number in the EIT will correspond to the entry in the MGT (ATSC, pp. 18 and 31).

PRINCIPLES OF LAW

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the Examiner to establish a factual basis to support the legal conclusion of obviousness. *See In re Fine*, 837 F.2d 1071, 1073 (Fed. Cir. 1988). In so doing, the Examiner must make the factual determinations set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 17 (1966).

Discussing the question of obviousness of a patent that claims a combination of known elements, *KSR Int'l v. Teleflex, Inc.*, 127 S. Ct. 1727 (2007), explains:

When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, § 103 likely bars its patentability. For the same reason, if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill. *Sakraida* [v. *AG Pro, Inc.*, 425 U.S. 273 (1976)] and *Anderson's-Black Rock[, Inc. v. Pavement Salvage Co.*, 396 U.S. 57 (1969)] are illustrative—a court must ask whether the improvement is more than the predictable use of prior art elements according to their established functions.

KSR, 127 S. Ct. at 1740.

If the Examiner's burden is met, the burden then shifts to the Appellants to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. *See In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992).

During examination of a patent application, a claim is given its broadest reasonable construction “in light of the specification as it would be interpreted by one of ordinary skill in the art.” *In re Am. Acad. Of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004).

ANALYSIS

Appellants argue the claims as follows: (1) claims 1-5; (2) claims 8-12; (3) claims 6 and 7; and (4) claims 13-16. Each group will be addressed separately.

Claims 1-5

We first turn to the rejection of claims 1-5 under 35 U.S.C. § 103(a) as being unpatentable over Eyer and ATSC. Regarding representative independent claim 1,⁴ the Examiner finds that the combination of Eyer and ATSC teaches all the recited elements (Ans. 3-5). Appellants argue that the cited prior art individually or in combination does not disclose or teach: (1) a tertiary table hierarchically linked to a secondary table or (2) a second version identifier conveyed in a secondary data table and updated in response to a version change in the tertiary table (App. Br. 9-16).

Claim 1 recites “a second version identifier conveyed in a secondary data table and updated in response to *at least one of*, a version change in said secondary table, and a version change in a tertiary table hierarchically linked to said secondary table” (emphasis added). Giving this recitation its

⁴ Appellants argue claims 1-5 as a group (Br. 9-16). Accordingly, we select representative independent claim 1 to decide the appeal. 37 C.F.R. § 41.37(c)(1)(vii).

broadest reasonable construction in light of the Specification as set forth in *Am. Acad. Of Sci. Tech. Ctr.*, 367 F.3d at 1364, the second identifier is updated in response to *either* (1) a version change in the secondary table *or* (2) a version change in a tertiary table. Thus, as the Examiner suggests (Ans. 8), we need not address whether the combination of Eyer and ATSC discloses or teaches a tertiary table hierarchically linked to a secondary table or a second version identifier updated in response to a version change in the tertiary table if the combination teaches the second version identifier is updated in response to a version change in the secondary table.

Eyer discloses the transmitted data blocks of the IPG are formatted using a MPEG-2 standard and tables, but does not disclose the tables are hierarchically linked (FF 8-9; Ans. 3). ATSC teaches one known standard compatible with data or bit streams using a MPEG-2 system that includes a MGT and at least one EIT hierarchically linked (FF 1, FF 2). A primary table or MGT defines the version for all the tables in the transport stream and includes ancillary information in the form of a first version identifier or the table_type_version_number (FF 3). A second table or the EIT also contains ancillary information including a second version identifier or version_number (FF 4). As further explained in ATSC, when the hours in a given day progress, certain EITs become obsolete, and the list of version numbers in the MGT as shown in Figure 5.1 and Table D.1 shift (FF 5). In addition, this shift includes updating version numbers in the tables (*Id.*). For example, EIT-1 becomes EIT-0, EIT-2 becomes EIT-1, and the version numbers of EIT-0 and EIT-1 have accordingly changed to those associated with the previous EIT-1 and EIT-2 respectively. ATSC also states the EIT will be updated to reflect the version number change (FF 7). ATSC, thus,

teaches a second version identifier conveyed in a secondary table is updated in response to a version change in the secondary table.

ATSC further explains that the first version identifier or table_type_version_number of the MGT is updated in response to a version change in at least one of the EITs (FF 6). First, ATSC states that the lists of version numbers in the MGT shift and that the MGT and its new version numbers or table_type_version_numbers are updated or changed (FF 5). For example, when the version number of the EIT-2 shifts to the EIT-1 position, the table_type_version_number for EIT-1 in the MGT will be updated in response to the version change in its associated EIT (FF 5, FF 6). Second, the table_type_version_number identifier in the MGT becomes the same as the version_number in the actual EIT and the value of the version_number in the EIT will correspond to the entry in the MGT (FF 11). Third, another version identifier or the version_number of the MGT is also incremented when any field in the table_types of the MGT changes. Thus, ATSC teaches the version number or identifier in the MGT is updated in response to a version change in the EIT.

Lastly, the IPG data in Eyer is formatted using a MPEG-2 standard or is MPEG-2 compliant (FF 8). ATSC also provides a standard for program guide data compatible with data streams in accordance with MPEG-2 systems (FF1): (1) to anticipate future services and changes in service; (2) to design a distributed information model as opposed to a centralized one; and (3) to take advantage of a standard that coordinates and combines program guides from a number of broadcasters (FF 10). One skilled in the art would have recognized that including the features of ATSC in Eyer would improve the Eyer device in the same manner of anticipating future available services,

designing a distributed information model, and coordinating program guides from a number of broadcasters. *KSR*, 127 S. Ct. at 1740. As ATSC teaches the limitations of claim 1 and provides ample rationale for combining with Eyer, we find this combination teaches a second version updated in response to at least a version change in the secondary table as recited in claim 1. We, therefore, need not address the alternative claim language in claim 1 of the “second version identifier . . . updated in response to . . . a version change in a tertiary table hierarchically linked to a secondary table” and Appellants’ related arguments.

For the above reasons, Appellants have not shown error in the obviousness rejection of claim 1 based on the collective teachings of Eyer and ATSC. Accordingly, we sustain the rejection of claim 1 and claims 2-5 which fall with claim 1.

Claims 8-12

Representative independent claim 8⁵ recites the similar structure as claim 1 but is a method claim that includes the steps for forming a program guide information and ancillary information into hierarchically ordered data tables. The Examiner relies on the same discussion pertaining to claim 1 to establish a prima facie case of obviousness (Ans. 3-5 and 7). Appellants repeat the previous arguments relating to Eyer and ATSC regarding claim 1 (App. Br. 16). We are not persuaded by these arguments, however, for the reasons previously discussed in connection with claim 1. Additionally,

⁵ Appellants argue claims 8-12 as a group (App. Br. 16). Accordingly, we select independent claim 8 as representative. *See* 37 C.F.R. § 41.37(c)(1)(vii).

merely pointing out what claim 8 recites is not considered an argument for separate patentability of the claim. 37 C.F.R. § 41.37(c)(1)(vii). In any event, such conclusory statements fall well short of rebutting the Examiner's prima facie case of obviousness – a position that we find reasonable.

For similar reasons, we will sustain the rejection of claim 8 and claims 9-12 which fall with claim 8.

Claims 6 and 7

Representative independent claim 6⁶ recites an apparatus that includes a processor for acquiring program guide data comprising hierarchically ordered data table partitions and including partitioning information, the partitioning information including partition identifiers assigned to individual partitions of the program guide data and the program guide data partitions dynamically repartitionable by reassignment of the partition identifiers in the partitioning information. The Examiner finds that the combination of Eyer and ATSC teaches all recited elements (Ans. 5-6). Appellants argue that neither Eyer nor ATSC discloses or suggests individually or in combination the recited partition identifiers. Specifically, Appellants contend ATSC only describes the PID values or table_type_PIDs assigned to individual partitions are shifted in the MGT table and the actual PID values do not change. ATSC, in Appellants' view, does not describe or suggest dynamically repartitioning by reassignment of the packet identifiers in the program guide (App. Br. 16-17).

⁶ Appellants argue claims 6 and 7 as a group (App. Br. 16-17). Accordingly, we select representative claim 6 to decide the appeal. 37 C.F.R. § 41.37(c)(1)(vii).

Claim 6 will be given its broadest reasonable interpretation in light of the Specification. *Am. Acad. Of Sci. Tech. Ctr.*, 367 F.3d at 1364. Claim 6 recites “partition identifiers” and does not limit the claim to require the partitions identifiers to be PID values in the tables nor does the Specification provide a special definition of this term. Additionally, the phrases “re-partitionable” and “re-assign partition identifiers” are not specially defined in the Specification, such that these terms must be construed to mean the program guide data partitions are dynamically repartitionable by reassignment of the PID values. The recited partition identifiers can, therefore, read on the above-discussed version number identifiers, and the recited partitions dynamically repartitionable by reassignment of the partitions identifiers can read on the above-discussed shift or change of version numbers in the EITs and MGT.

Also, as explained above, ATSC teaches using a processor to acquire program guide data comprising hierarchically ordered data table partitions or EITs (FF 2). ATSC further teaches identifiers, including PID values and version numbers (e.g., `table_type_version_number` and `version_number`) that are updated or reassigned within the MGT and the EIT as the day progresses (FF 5). This step of updating the PID values and version numbers in the tables includes dynamically repartitioning or regenerating by reassignment of the partition identifiers in the partitioning information (FF 5-7). For example, EIT-1 and its PID values and version numbers become EIT-0’s new version numbers. Moreover, ATSC discusses the version numbers defined in the MGT are shifted and updated (FF 5, FF 6). In effect, and as explained with respect to claim 1, this shifting and updating result in the partition identifiers of partition tables (e.g., EITs and MGT) being

dynamically repartitioned by a reassignment of the partition identifiers in the program guide as recited in claim 6.

For the above reasons, Appellants have not shown error in the obviousness rejection of claim 6 based on the collective teachings of Eyer and ATSC. Accordingly, we sustain the rejection of claim 6 and claim 7 which falls with claim 6.

Claims 13-16

Representative independent claim 13⁷ recites the similar structure as claim 6 but is a method claim that includes the steps for forming a program guide information and ancillary information into hierarchically ordered data tables. The Examiner relies on the same discussion pertaining to claim 6 to establish a prima facie case of obviousness (Ans. 3-7). Appellants repeat the previous arguments relating to Eyer and ATSC regarding claim 6 (App. Br. 17). We are not persuaded by these arguments, however, for the reasons previously discussed in connection with claim 6. Additionally, merely pointing out what claim 13 recites is not considered an argument for separate patentability of the claim. 37 C.F.R. § 41.37(c)(1)(vii). In any event, such conclusory statements fall well short of rebutting the Examiner's prima facie case of obviousness – a position that we find reasonable.

For similar reasons, we will sustain the rejection of claim 13 and claims 14-16 which fall with claim 13.

⁷ Appellants argue claims 13-16 as a group (App. Br. 17). Accordingly, we select representative claim 13 to decide the appeal. 37 C.F.R. § 41.37(c)(1)(vii).

CONCLUSION

For the foregoing reasons, Appellants have not shown error in the Examiner's obviousness rejection of claims 1-16.

DECISION

The decision of the Examiner to reject claims 1-16 is affirmed.

No period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

Appeal 2008-2896
Application 09/622,331

AFFIRMED

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